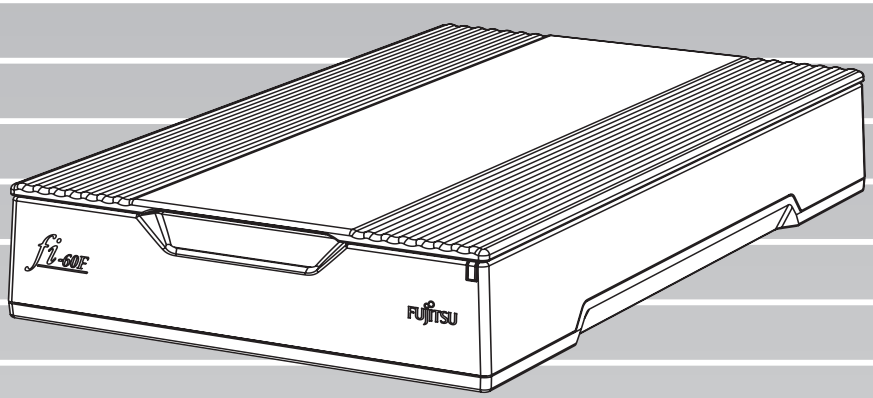
P3PC-1112-02EN

fi-60F Image Scanner

Operator's Guide



FUJITSU

CONTENTS

INTRODUCTION..... iii

■ Regulatory Information iii

■ Note, Liability vi

■ Safety Precautions viii

Chapter 1 BASIC SCANNER OPERATIONS..... 1

1.1 Turning the Scanner ON 2

1.2 Loading Documents on the Scanner for Scanning 3

1.3 How to Use the Scanner Driver 5

1.4 Correcting skewed documents 18

1.5 Excluding a Color in the Image (dropout color) 20

Chapter 2 DAILY CARE 21

2.1 Cleaning Materials 22

2.2 Cleaning the Scanner 22

Chapter 3 TROUBLESHOOTING 25

3.1 Remedying Typical Troubles 26

3.2 Items to Check Before Contacting the Agent Where You Bought the Scanner 32

3.3 Checking the Label on the Scanner 34

Chapter 4 SCANNER SPECIFICATION 35

4.1 Basic Specifications 36

4.2 Installation Specifications 37

4.3 External Dimensions 38

INDEX IN-1

INTRODUCTION

Thank you for purchasing the fi-60F Scanner product.
This document describes how to handle fi-60F Scanner and basic operation methods. Before you start using fi-60F Scanner be sure to thoroughly read this manual to ensure correct use.

■Regulatory Information

FCC Declaration

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is located.
- Consult your dealer or an experienced radio/TV technician.

FCC warning: Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

The use of a shielded interface cable is required to comply with the Class B limits of Part 15 of FCC rules.
The length of the AC cable must be 2 meters (6.6 feet) or less.

Canadian DOC Regulations

This digital apparatus does not exceed the Class B limit for radio noise emissions from digital apparatus set out in the Radio interference Regulations of the Canadian Department of Communications.
This Class B digital apparatus complies with Canadian ICES-003.

Le présent appareil numérique n'émet pas de bruits radioélectriques dépassant les limites applicables aux appareils numériques de la classe B prescrites dans le règlement sur le brouillage radioélectrique dicté par le Ministère des Communications du Canada. Cet appareil numérique de classe B est conforme à la norme NMB-003 du Canada.

Bescheinigung des Herstellers / Importeurs

Für den fi-60F wird folgendes bescheinigt:

- In Übereinsstimmung mit den Bestimmungen der EN45014(CE) funkentstört
- Maschinenlärminformationsverordnung 3.GPSGV: Der höchste Schalldruckpegel beträgt 70 dB (A) oder weniger, gemäß EN ISO 7779.

International ENERGY STAR® Program

As an ENERGY STAR® Partner, PFU LIMITED has determined that this product meets the ENERGY STAR® guidelines for energy efficiency.
The International ENERGY STAR® Office Equipment Program is an international program that promotes energy saving through the penetration of energy efficient computers and other office equipment. The program backs the development and dissemination of products with functions that effectively reduce energy consumption. It is an open system in which business proprietors can participate voluntarily. The targeted products are office equipment such as computers, monitors, printers, facsimiles, copiers, scanners, and multifunction devices. Their standards and logos are uniform among participating nations.

Use in High-safety Applications

This product has been designed and manufactured on the assumption that it will be used in office, personal, domestic, regular industrial, and general-purpose applications. It has not been designed and manufactured for use in applications (simply called "high-safety applications" from here on) that directly involve danger to life and health when a high degree of safety is required, for example, in the control of nuclear reactions at nuclear power facilities, automatic flight control of aircraft, air traffic control, operation control in mass-transport systems, medical equipment for sustaining life, and missile firing control in weapons systems, and when provisionally the safety in question is not ensured. The user should use this product with adopting measures for ensuring safety in such high-safety applications. PFU LIMITED assumes no liability whatsoever for damages arising from use of this product by the user in high-safety applications, and for any claims or compensation for damages by the user or a third party.

Trademarks

Microsoft and Windows are registered trademarks of Microsoft Corporation in the United States and/or other countries.
ISIS and QuickScan are trademarks or registered trademarks of EMC Corporation in the United States.
Adobe, the Adobe logo, and Acrobat are either registered trademarks of Adobe Systems Incorporated in the United States and/or other countries.
Other product names are the trademarks or registered trademarks of the respective companies.

How Trademarks Are Indicated In This Manual

References to operating systems (OS) are indicated as follows:

Windows 98	Microsoft® Windows® 98 operating system.
Windows Me	Microsoft® Windows® Millennium Edition operating system.
Windows 2000	Microsoft® Windows® 2000 Professional operating system.
Windows XP	Microsoft® Windows® XP Professional operating system, Microsoft® Windows® XP Home Edition operating system.

Where there is no distinction between the different versions of the above operating system, the general term "Windows" is used.

Manufacturer

PFU LIMITED

International Sales Dept., Imaging Business Division, Products Group
Solid Square East Tower, 580 Horikawa-cho, Saiwai-ku, Kawasaki-shi Kanagawa 212-8563, Japan
Phone: (81-44) 540-4538

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■Note, Liability

BEFORE USING THIS PRODUCT, PLEASE READ THIS MANUAL CAREFULLY. IF THIS PRODUCT IS NOT USED CORRECTLY, UNEXPECTED INJURY CAN OCCUR TO USERS OR BYSTANDERS

Keep this manual in a safe place so that it can be easily referred to during use of this product.

While all efforts have been made to ensure the accuracy of all information in this manual, PFU assumes no liability to any party for any damage caused by errors or omissions or by statements of any kind in this manual, its updates or supplements, whether such errors are omissions or statements resulting from negligence, accidents, or any other cause. PFU further assumes no liability arising from the application or use of any product or system described herein; nor any liability for incidental or consequential damages arising from the use of this manual. PFU disclaims all warranties regarding the information contained herein, whether expressed, implied, or statutory.

Warning Indications Used In This Manual

⚠WARNING	This indication alerts operators to an operation that, if not strictly observed, may result in severe injury or death.
⚠ CAUTION	This indication alerts operators to an operation that, if not strictly observed, may result in safety hazards to personnel or damage to equipment.

Symbols Used In This Manual

This symbol alerts operators to particularly important information. Be sure to read this information.

This symbol alerts operators to helpful advice regarding operation.

A TRIANGLE symbol indicates that special care and attention is required. The drawing inside the triangle shows the specific caution.

A CIRCLE with a diagonal line inside shows action which users may not perform.
The drawing inside or under the circle shows the specific action that is not allowed.

Outline characters on a colored background show instructions users should follow.
It may also include the drawing that shows the specific instruction.

Screen Examples In This Manual

The screen examples in this manual are subject to change without notice in the interest of product improvement. If the actual displayed screen differs from the screen examples in this manual, operate by following the actual displayed screen while referring to the User's Manual of the scanner application you are using. The screenshots in this manual were captured from the FUJITSU TWAIN32 scanner driver, ScandAll 21 Image Capturing Utility Software, FUJITSU ISIS scanner driver and QuickScan™ image capturing software .

About Maintenance

The user must not perform repairs on this scanner.
Contact the store where you purchased the scanner or an authorized FUJITSU Image Scanner service provider to have repairs done on this product.

■Safety Precautions

⚠WARNING

Do not damage the AC cable.

A damaged AC cable may cause fire or electric shock. Do not place heavy objects on AC cables, or pull, bend, twist, heat, damage or modify AC cables.
Do not use damaged AC cables or power plugs, or install any cables or power plugs to loose wall sockets.

Use only specified AC cables and connector cables.

Use only specified AC cables and connector cables. Failure to use the correct cables might cause electric shock and/or equipment failure.

Do not use the AC cable provided with this scanner with other devices, since this may cause equipment failure or electric shock.

Use this scanner only at the indicated power voltage. Do not connect to multiple-power strips.

Use this scanner only at the indicated power voltage and current. Improper power voltage and current might cause fire or electric shock. Do not connect to multiple-power strips.

Do not touch the AC cable with wet hands.

Do not touch the power plug with wet hands. Doing so can cause electric shock.

Wipe any dust from the power plug.

Wipe off any dust from metal parts on the power plug or metal fittings with a soft, dry cloth. Accumulated dust can cause fire or electric shock.

Do not install the device in locations that has oil smoke, steam, humidity, and dust.

Do not install the scanner in locations subject to oil smoke, steam, humidity, and dust. Doing so might cause a fire or electric shock.

Turn the scanner OFF if it is damaged.

If the scanner is damaged for any reason, immediately unplug the power cable to turn off the scanner. Contact the store where you purchased the scanner.

Do not put liquids inside the scanner.

Do not insert or drop metal objects in to the scanner. Do not scan wet documents or documents with paper clips or staples. Do not splash or allow the scanner to get wet.

If foreign objects (water, small metal objects, liquids, etc.) get inside the scanner, immediately unplug the power cable to turn off the scanner. Then, contact the store where you bought the scanner or the Maintenance Service Center. Pay particular attention to this warning in households where there are small children.

Do not touch the inside of the scanner unless necessary.

Do not take apart or modify the scanner. The inside of the scanner contains high-voltage components. Touching these components might cause electric shock or fire.

Do not use the scanner if there is a strange odor.

If you detect excessive heat coming from the device or detect other problems such as smoke, strange smells or noises, immediately unplug the power cable to turn off the scanner. Make sure that any smoke coming from it has stopped, before contacting the store where you bought the scanner or an authorized FUJITSU scanner service provider.

⚠ CAUTION

Do not install the scanner on unstable surfaces.

Make sure that the scanner is installed on a flat, level surface and that none of its parts extend beyond the surface top, such as a desk or table. Do not install the scanner on unstable surfaces. Install the scanner on a level surface that is free of vibration to prevent it from falling.

Install the scanner on a strong surface that will support the weight of the scanner and other devices.

Do not place heavy objects or stand on top of the scanner.

Do not place heavy objects on the scanner or use the scanner's surface top to perform other work. Improper installation might cause injuries and equipment failure.

Firmly insert the power plug.

Firmly insert the power plug as far it can go into the power outlet.

Do not use the scanner immediately after moving it from a cold place into a warm room.

Do not use the device immediately after moving it from a cold place into a warm room. Condensation may occur, which might lead to scanning errors. Let the device dry about one or two hours before you use it.

Before moving the scanner, disconnect the power plug from the power outlet.

Do not move the scanner with the power and interface cables connected as this can damage the cables, which can later cause fire, electric shock as well as injury.

Before moving the scanner, be sure to disconnect the power plug from the power outlet, and all other data cables. Make sure that the floor is free of any obstructions.

Protect the scanner from static electricity.

Install the scanner away from strong magnetic fields and other sources of electronic noise. Also, protect the scanner against any static electricity, which can cause the scanner to malfunction.

Do not use aerosol sprays near the scanner.

Do not use aerosol sprays to clean the scanner. Aerosol sprays can blow dirt and dust inside the scanner, resulting in scanner failure or malfunction.

Disconnect the power plug from the power outlet when the scanner is not used for a long period of time.

When the scanner is not going to be used for a long period of time, be sure to disconnect the power plug from the power outlet.

Do not install the scanner in direct sunlight.

Do not install the scanner under direct sunlight or near heating apparatus. Doing so might cause excessive heat to build up inside the scanner, which can cause scanner trouble or even fire. Install the scanner in a well-ventilated location.

Before moving the scanner, make sure the shipping lock is locked.

When moving the scanner, be sure to lock the shipping lock in order to prevent damages to the scanner.

Chapter 1

BASIC SCANNER OPERATIONS

This chapter describes basic scanner operations.

In this chapter Windows XP screenshots are illustrated.
The screens and operations may differ slightly if the OS that you are using is not Windows XP.
Also, when FUJITSU TWAIN32 or FUJITSU ISIS is updated the screens and operations noted in this chapter will differ slightly.

1.1 Turning the Scanner ON 2

1.2 Loading Documents on the Scanner for Scanning 3

1.3 How to Use the Scanner Driver 5

1.4 Correcting skewed documents 18

1.5 Excluding a Color in the Image (dropout color) 20

1.1 Turning the Scanner ON

Because the power supply of this scanner is linked to the power supply of your PC, fi-60F is not equipped with a separate power button or switch.
If you keep connecting the AC adapter to the the scanner, plugging the AC cable into a power outlet, and connecting the scanner to your PC, you can use the scanner without reminding of the switching.

If you turn on your PC...

The Scanner LED lights when starting up Windows (Scanner turned on)

If you turn off your PC...

The Scanner LED goes out when shutting down Windows (Scanner turned off)

You can also turn off the scanner by doing the following:

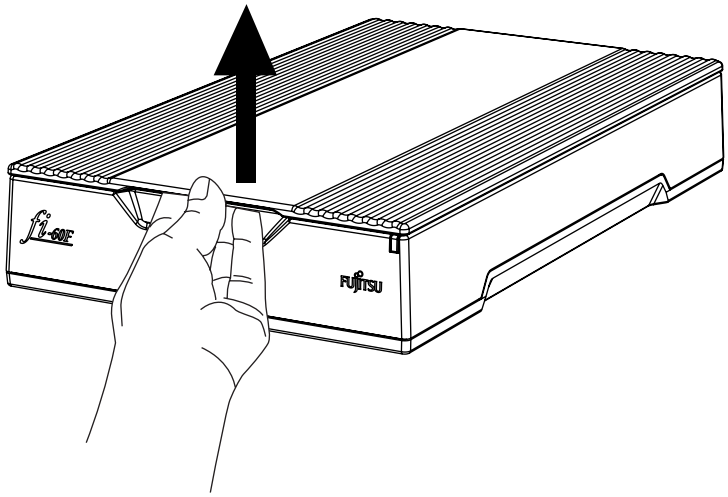
- Disconnect the USB cable from the scanner or PC.
- Disconnect the AC adapter from the scanner.
- Unplug the AC cable from the power outlet or the AC adapter.

■ Power Save Mode

The Power Save mode keeps the scanner in a low-powered state after it has been turned ON.
If no operation is performed on the scanner for 15 minutes, the scanner automatically switches to the Power Save mode.
To return from the Power Save mode, perform a scan using the scanner driver.

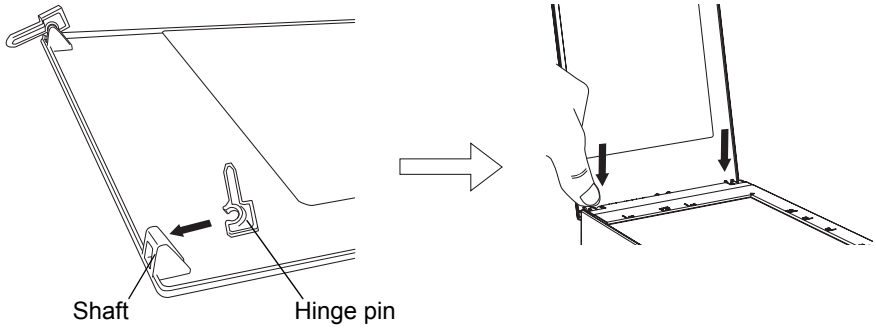
1.2 Loading Documents on the Scanner for Scanning

1. Lift up the document cover.

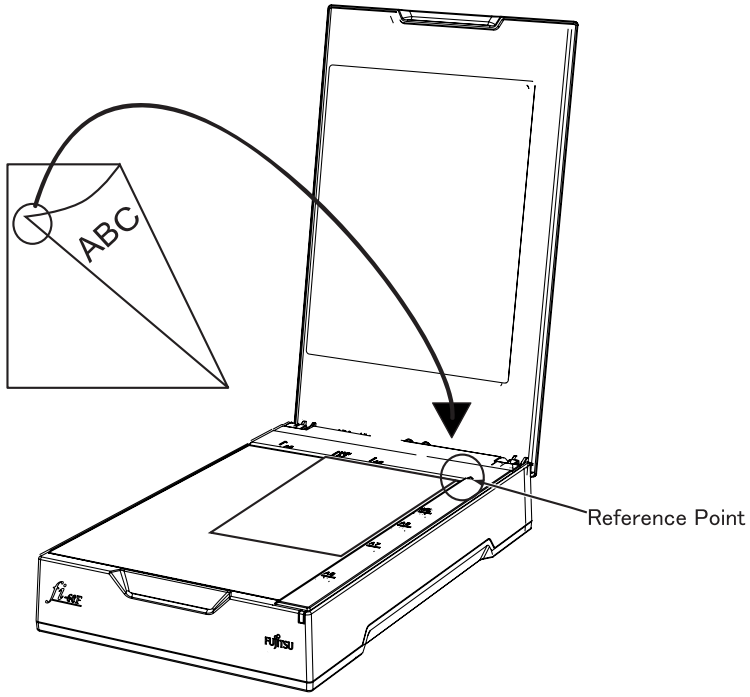


ATTENTION

For Breakage prevention, the document cover may come off if you open the document cover too much.
If it comes off, pull out the hinge pins from the scanner once, set them to the document cover shaft, then install the document cover to the scanner.



2. Load the document on the document bed with the scanning face down and the top left corner aligned to the reference point.



3. Gently close the document cover.

4. Start up the scanner application, and scan the document.

For details on how to scan documents see "1.3 How to Use the Scanner Driver" (page 5).

ATTENTION

- You can pull out the document cover from the scanner when you scan the thick document like a book.
  In such a case, press down the document from the top, let it stick to the document bed firmly.
  <Attention>
  Be careful of the following points:
  The scanned image will become blurred if the document loses touch with the document bed by curl, crease, etc. .
  Because of opening the document cover, the light from an indoor fluorescent light may penetrate the document, and may affect the brightness of image data. (The thinner document is, the more it is influenced.)
  In such a case, scan the document with closing the document cover.
- Do not disconnect the USB cable or AC adapter from the scanner when the scanning operation is ongoing.

1.3 How to Use the Scanner Driver

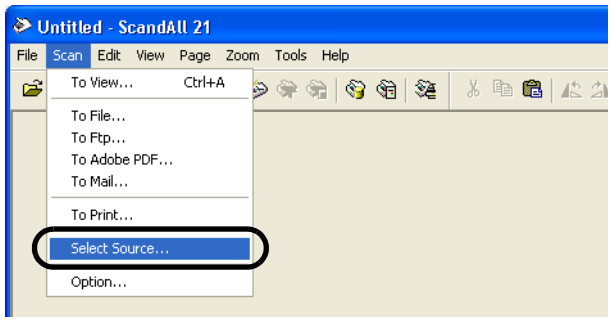
■ FUJITSU TWAIN32 Scanner Driver

FUJITSU TWAIN32 Scanner Driver is designed for scanning documents with FUJITSU image scanner fi series by using application software that complies with the TWAIN standard.
The following describes the procedure with examples of ScandAll 21 for ordinary scanning by using this driver software.

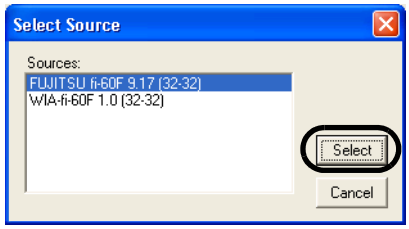
Using the FUJITSU TWAIN32 Scanner Driver for scanning

1) Startup the application.
From the [Start] menu, select [All Programs]-[Scanner Utility for Microsoft Windows] and click [ScandAll 21].

2) Select your scanner on the window below.
Select [Select Source] from the [Scan] menu.



3) Select the scanner to use, then click the [Select] button.



Select [FUJITSU fi-60F], then click the [Select] button.

4) Load the documents on the scanner.
For details on loading documents, refer to "1.2 Loading Documents on the Scanner for Scanning" (page 3).

5) Open the TWAIN Driver window.
Select [To View] from the [Scan] menu.

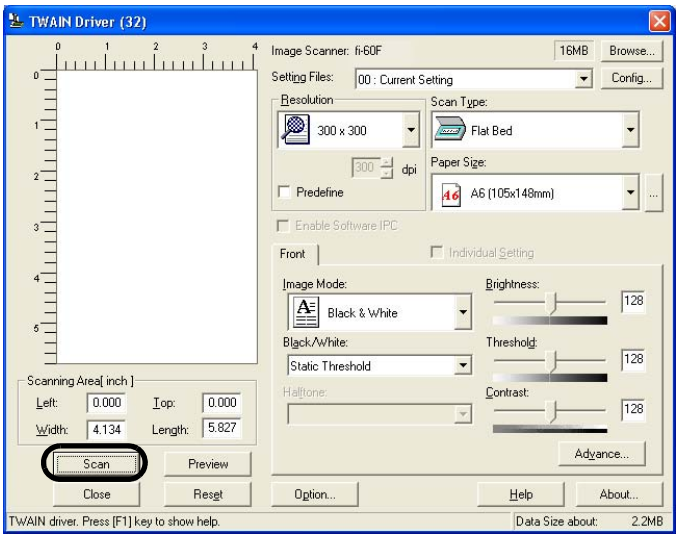
HINT

ScandAll 21 provides scanning methods as follows:

- [To View...]: Displays scanned images on the window.
- [To File...:]: Saves scanned images as files (*.BMP, *.TIF, *.JPG).
- [To Ftp...:]: Transfers scanned images to a FTP server.
- [To Adobe PDF...:]: Saves scanned images as PDF files.
  (*Adobe Acrobat (sold separately) must be installed beforehand.)
- [To Microsoft SharePoint Portal Server...]: Transfers scanned images to Microsoft Share Point Portal Server.
- [To Mail...]: Launches mailer software and attaches scanned images to e-mail.

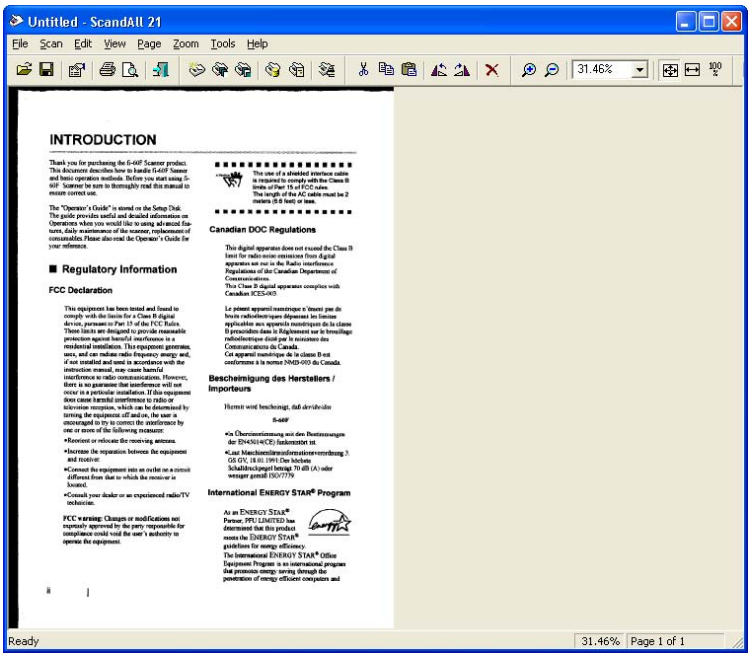
For details, refer to "ScandAll 21 Help".

6) Configure settings for scanning and click the [Scan] button.



For details about the settings on this window, refer to "Setting Window for FUJITSU TWAIN32 Scanner Driver" (page 8).

⇒ The images of scanned documents are displayed on the [ScandAll 21] window.



Depending on the settings of the application software, images may not be displayed. For details, refer to the documentation or Help file of your application.

e.x.) When you select [To File...] from the [Scan] menu of ScandAll 21, images of scanned documents are not displayed on the window.

7) Save the scanned images.

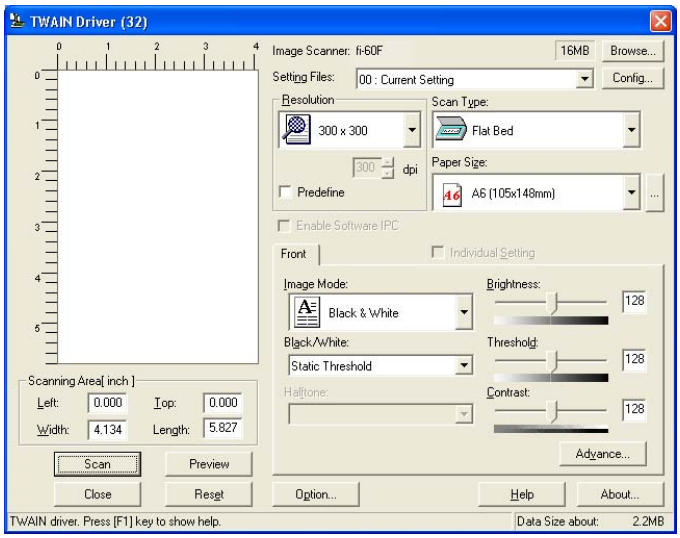
Select [Save As...] from the [File] menu to save the scanned images.

If you wish to start another scanning, return to procedure 4.

8) End the application.

Select [Exit] from the [File] menu.

Setting Window for FUJITSU TWAIN32 Scanner Driver



You can configure settings for the FUJITSU TWAIN32 Scanner Driver on this window. The following describes the main setting items.

- For details on each functions, refer to "FUJITSU TWAIN32 Scanner Driver Help" (appears by clicking the [Help] button or pressing the [F1] key).
- Depending on the type of your scanner, available setting items or range of setting values vary.

Resolution

Specifies the resolution of scanning.

It can be specified by selecting a default value from the list or customizing (specify any resolution in 1 dpi unit).

By marking the [Predefine] checkbox, you can select one from three predefined settings as [Normal], [Better], [Best] to scan documents instead of setting details by yourself.

Otherwise, you can change the details of the predefined settings on the [Resolution Setting] window, which appears when you click on the [...] button.

Paper Size

Select the size of documents to be scanned from this list.

Windows for customizing the paper size will appear when you click on [...] besides the list. You can save any document size as a customized setting (up to three) or for changing the order of the paper size in the list.

Image Mode

Specifies the image type for the scanned documents.

Black & White	Documents are scanned in binary (black and white).
Halftone	Documents are scanned through halftone processing in black and white.
Grayscale	Documents are scanned in gradations from black to white. For this mode you can select 256 gradations or 4 bit (16 gradations).
Color	Documents are scanned in color. For this mode, you can select 24 bit Color, 256 Color or 8 Color.

[Scan] button

Starts scanning documents with the current settings.

[Preview] button

Documents are scanned preliminarily before the actual scanning.
You can confirm the image of the documents in the preview window.

[Close] button

Saves the current settings and closes this window.

[Reset] button

Used to undo changes of settings.

[Help] button

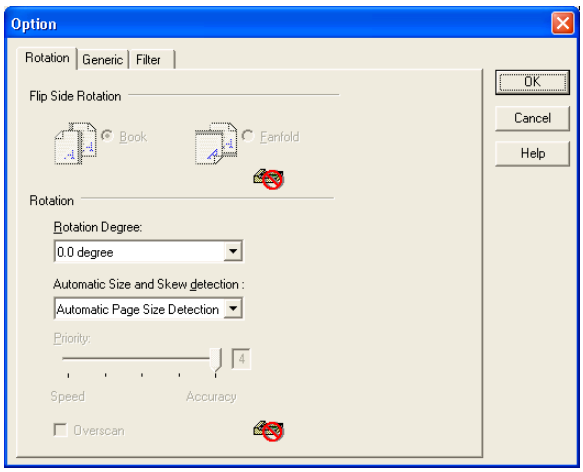
Opens the "FUJITSU TWAIN32 Scanner Driver Help" window. The window also opens by pushing the [F1] key.

[About...] button

Opens an information window about the FUJITSU TWAIN32 Scanner Driver's version.

[Option...] button

You can set up the details of optional functions on the window below.



[Rotation] tab

Select this tab when setting image rotation and detection of document size.

[Generic] tab

Select this tab to change the unit of the size displayed on the Setting Window for the FUJITSU TWAIN32 Scanner Driver. (Millimeters, Inches, and Pixels are available)

[Filter] tab

Select this tab for setting the image processing filter(s).
Page Edge Filler: Fills up the margins of the scanned documents with a selected color.
Digital Endoser: A character string, such as the alphabet and numbers, can be added in the scanned document.

[Advance...] button

Click this button for settings of the advanced image processing.
You can set Edge Extract, Gamma Pattern, White Level Follower, Dropout Color, Reverse, etc.

[Config...] button

Click this button for configuring the Setting Files.
You can save the changed settings as a Setting File. From next scanning, the settings are quickly changed by using these Setting Files.

For details of each function, refer to the "FUJITSU TWAIN32 Scsnner Driver Help".

■ FUJITSU ISIS Scanner Driver

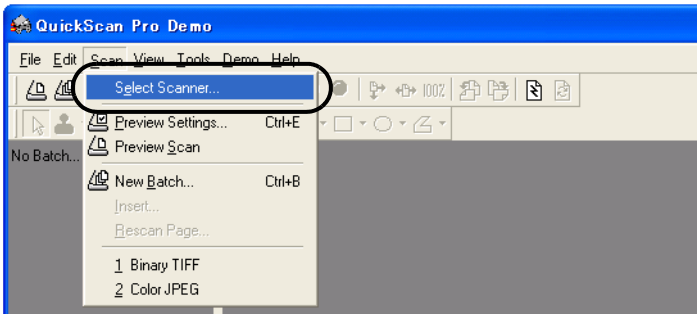
FUJITSU ISIS Scanner Driver is designed for scanning documents with FUJITSU image scanner fi series by using application software that complies with The ISIS standard.
The following describes the procedure with examples of QuickScan for ordinary scanning by using this driver software.

The procedure may vary depending on your application. If you use an application other than QuickScan, please refer to its Guide or Help for further information.

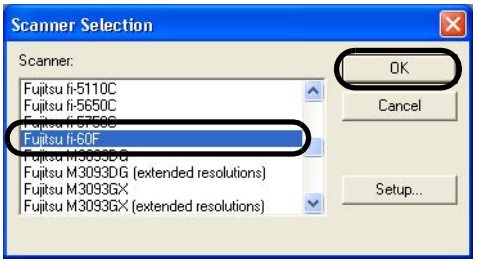
Using the FUJITSU ISIS Scanner Driver for Scanning

1) Startup the application.
   From the [Start] menu, select [All Programs] - [QuickScan] and click [QuickScan].

2) Select your scanner on the window below.
   Select [Scan] - [Select Scanner] on the menu bar.

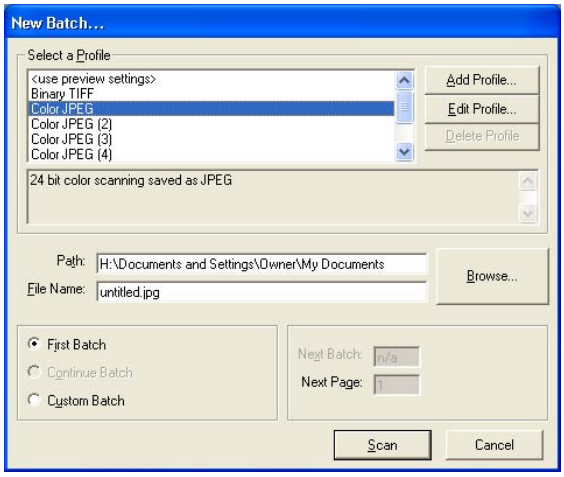


3) Select [Fujitsu fi-60F], then click the [OK] button.



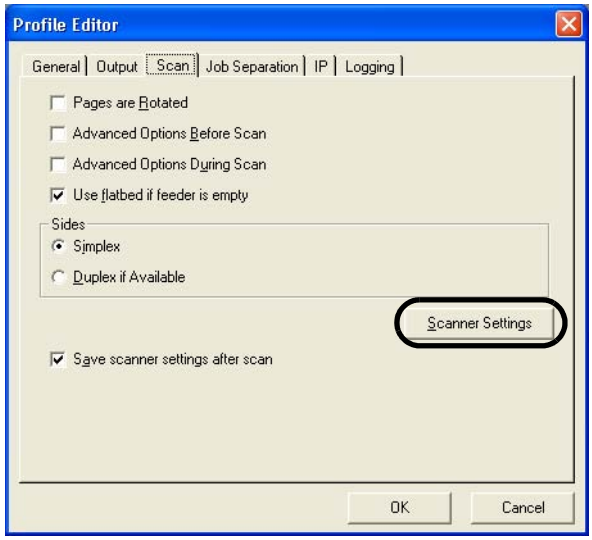
4) Select [Scan] - [New Batch] on the menu bar.

5) Select the profile for scanning.



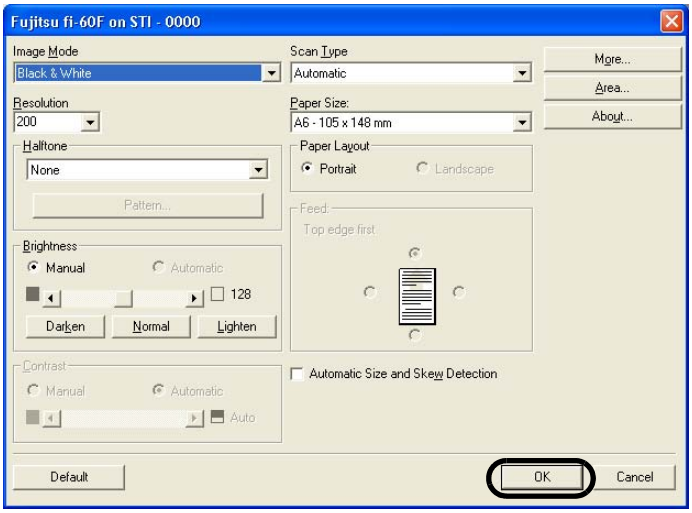
- When creating a new profile
  Select one from existing profiles and click [Add Profile...] button.
  ⇒ A new profile will be created based on the profile you select.
- When changing the settings of already existing profiles
  Select one from existing profiles and click [Edit Profile...] button.
  ⇒ The settings of the selected profile can be changed.
- When using an existing profile
  Select one from an existing profiles.
  ⇒ Scanning will be started according to the settings of the selected profile.
  Go to procedure 9.

6) Open the window of ISIS Driver.
   Select the [Scan] tab and click the [Scanner Settings] on the [Profile Editor] window.



⇒ The configuration window of ISIS driver appears.

7) Configure settings for scanning and click the [OK] button.

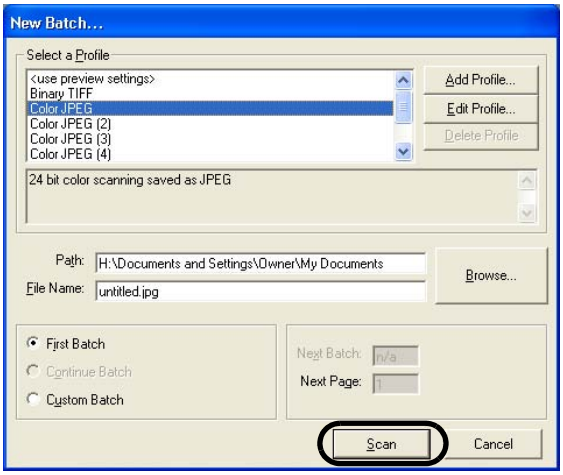


For details on this dialog box, refer to "Configuration Window of FUJITSU ISIS Scanner Driver" (page 14).

8) The [Profile Editor] window appears. Click the [OK] button to return to [New batch] dialog.

9) Load the documents on the scanner.

10) Click the [Scan] button.



⇒ Scanned images are displayed on the window.

Refer to the "QuickScan Overview" or the "QuickScan Help" for further information on functions and operations of QuickScan. After the installation of QuickScan, it is registered in the [Start] menu.

Configuration Window of FUJITSU ISIS Scanner Driver

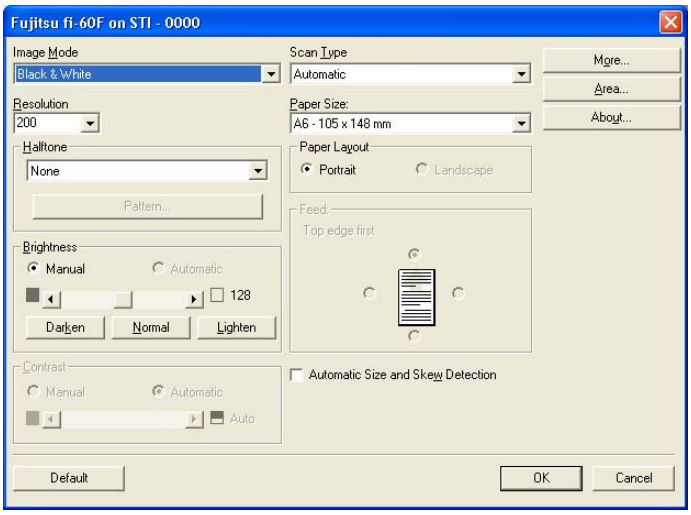


Image Mode

Select a color mode suitable for the purpose from the menu.

Black & White	Scans data in binary (black and white). Distinguishes black from white according to the fixed threshold. This scanning mode is suitable for scanning line drawings and text documents.
16-level Grayscale	Scans data to 16 shades of gray.
256-level Grayscale	Scans data to 256 shades of gray. This mode uses 8 bits per pixel. This mode is suitable for scanning monochrome photographs.
24-bit Color	Scans data as full-colored image using 24 bits per pixel. This mode is suitable for scanning color photographs.
Image Processing	Binary processing is applied to the scanned images. This mode is available only when Image Processing Software Option (separately sold) is installed. Please refer to the "User's Guide of Image Processing Software Option" for details.

Resolution

Specifies the number of pixels (dots) per inch.

Select a fixed resolution from the list or enter any value (from 50 to 600) manually.

A higher resolution produces finer image, but requires much more memory.

Halftone

Select the halftone pattern for halftone scanning. This setting is available when "Black & White" is selected in the "Image Mode".

Dither Pattern 0	This setting is suitable for scanning dark photographs.
Dither Pattern 1	This setting is suitable for scanning dark-colored documents containing both text and photographs.
Dither Pattern 2	This setting is suitable for scanning light photographs.
Dither Pattern 3	This setting is suitable for scanning light-colored documents containing both text and photographs.
Error Diffusion	This function minimizes differences of color levels due to subtractive color process by diffusing the difference to the adjacent pixels. This mode is suitable for scanning images of photographs, etc.
Download	Executes processing with the dithered download pattern specified in the dithered download file.

Brightness

Sets the brightness of the entire image. Specify the brightness as a number within the range of 1 (dark) to 255 (bright). To brighten the entire image, increase the value of the setting. To darken the entire image, decrease the value.

Contrast

Sets the contrast between light and shadow of the scanned image. Specify the contrast as a number within the range of 1 (low [soft]) to 100 (high [sharp]). Increasing this value makes the contrast sharper.

Paper Size

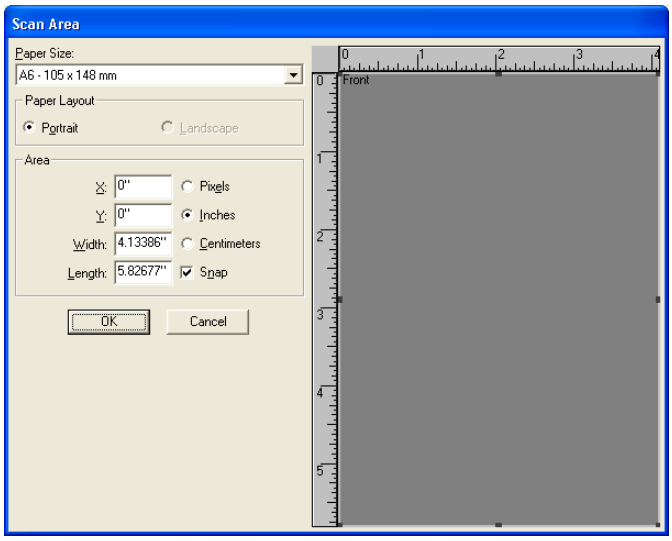
Selects a paper size according to the size of the document to be scanned. Select a standard paper size from the list.

Automatic Size and Skew detection

This option will adjust the output to the detected page size, and it will detect and automatically correct the skew of the document.

[Area...] button

Opens the Scan Area dialog box.
Specify scan area for the document size.
The size can be set by dragging the frame with mouse.
Otherwise, enter any value for the setting.

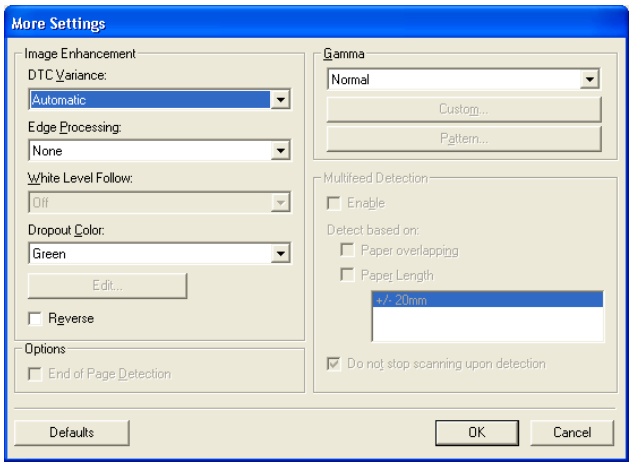


[About...] button

This button displays the version information.

[More...] button

Opens [More Settings] window. Used for setting advanced features.



Gamma

Specifies Gamma correction. Correction patterns are: "Normal", "Soft", "Sharp", "Custom", or "Download".

DTC Variance

This option specifies the value for adjusting the variance based on the brightness of the image.

Edge Processing

This option specifies the sharpness of contour extraction.

Low, Mid, High	Emphasizes contour of images. Available settings are: Low, Mid, High
Smoothing	Smoothes jaggy images.

Dropout Color

This option excludes a selected color (the three primary colors of light i.e. green, red, blue) from scanned images. For example, if the document contains black text in a red frame and when the red color is selected, the scanner reads only the text and eliminate (drop out) the red frame.

If you do not wish to have any colors dropped out select "None".

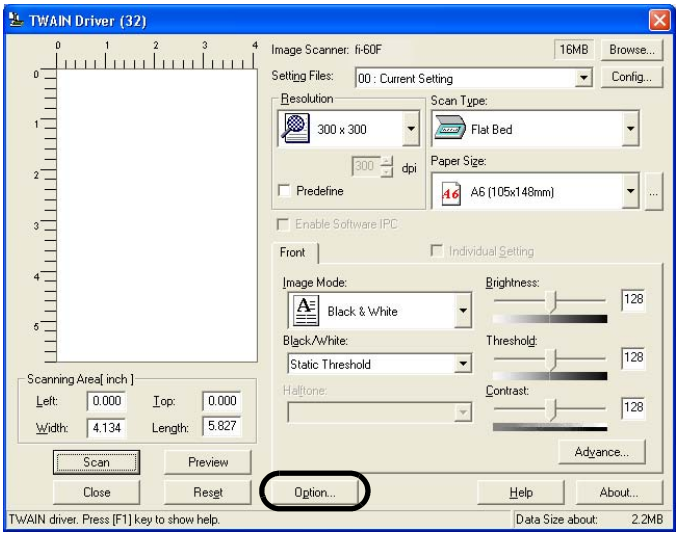
Reverse

Colors of scanned images are reversed.

1.4 Correcting skewed documents

You can set the scanner so that skew of documents are detected and corrected automatically when skewed documents are fed into the ADF. Change the setting in the [TWAIN Driver] dialog box to enable this function. The following shows the procedure for changing the setting in the dialog box:

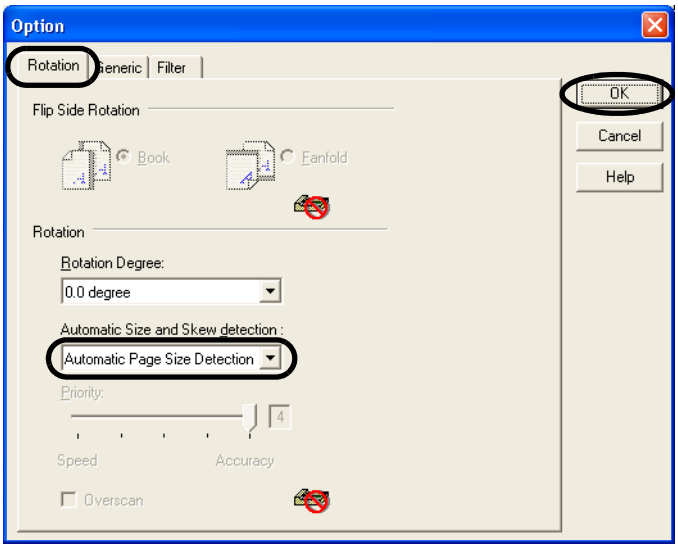
1. Click [Option] button in the [TWAIN Driver] dialog box.



⇒ The [Option] dialog box appears.

2. Click the [Rotation] tab.

3. Select the [Automatic page size detection] from the [Automatic Size and Skew Detection] menu.



4. Click the [OK] button. The display returns to [TWAIN Driver] dialog box. Perform the scanning operation on the dialog box.

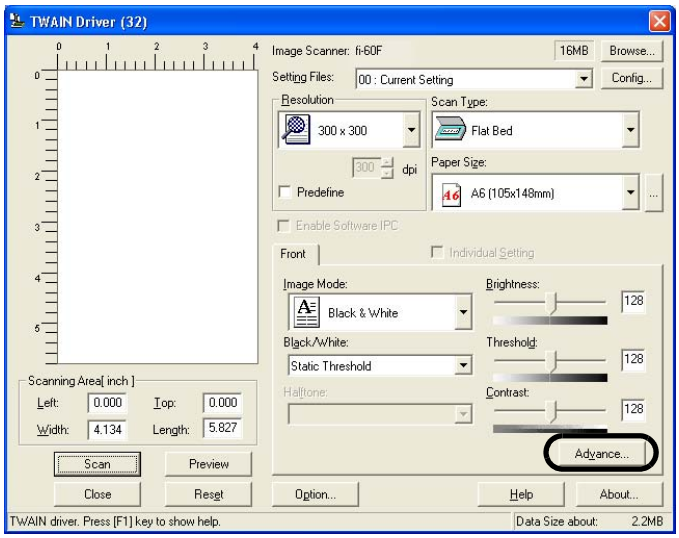
When using either of the following documents, the automatic page size detection may not function correctly:

- Not rectangular documents
- Documents which their edges are filled

1.5 Excluding a Color in the Image (dropout color)

A selected color (primary colors: red, green or blue) can be removed (dropped out) from the scanned image data. For example, if the document contains black text in a green frame, you can set the scanner to read only the text and eliminate (drop out) the green frame. To set the scanner to drop out a color, change the settings in the [TWAIN Driver] dialogbox before scanning.

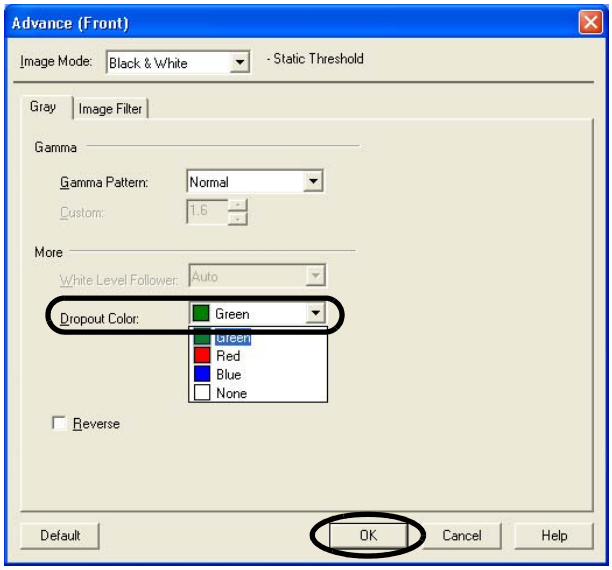
1. Click the [Advance...] button in the [TWAIN Driver] dialog box.



⇒ The [Advance] dialog box appears.

2. Select the color to be drop out from [Dropout Color] under [More].

   For example, if the document contains black text in green frame, select [Green] so that the scanner only reads the text and eliminates the frames. If you do not wish to have any colors dropped out select "None".



3. Click the [OK] button.

   The [TWAIN Driver] dialog box will be redisplayed. Continue scanning from this dialog box.

Chapter 2

DAILY CARE

This chapter describes how to clean the scanner.

2.1 Cleaning Materials..... 22

2.2 Cleaning the Scanner..... 22

2.1 Cleaning Materials

The table below shows the cleaning materials that are used on this scanner.

Cleaning Materials	Part No.	Remarks
Cleaner F1 (or isopropyl alcohol) 	CA99501-0013	1 bottle (100 ml) Moisten cloth with this fluid and wipe the scanner clean.
Soft, dry, lint-free cloth	Any commercially available cloth	

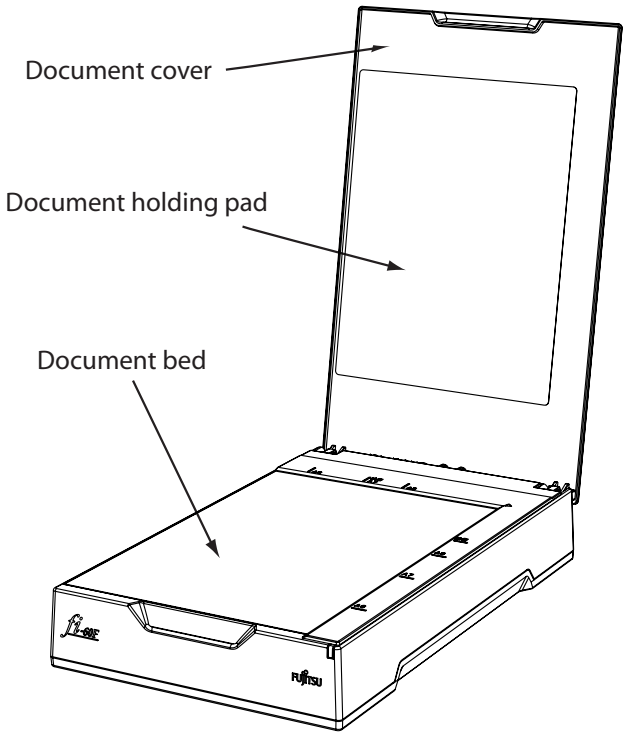
For details on Cleaner F1, consult the agent where you bought your scanner.

2.2 Cleaning the Scanner

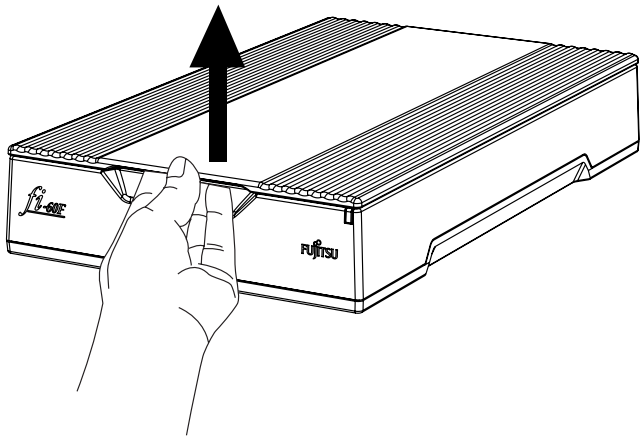
Any detergent for cleaning windows or glass cleaner can be used instead of F1 fluid. However, do not use paint thinner or other organic solvents.

The following parts needs to be cleaned:

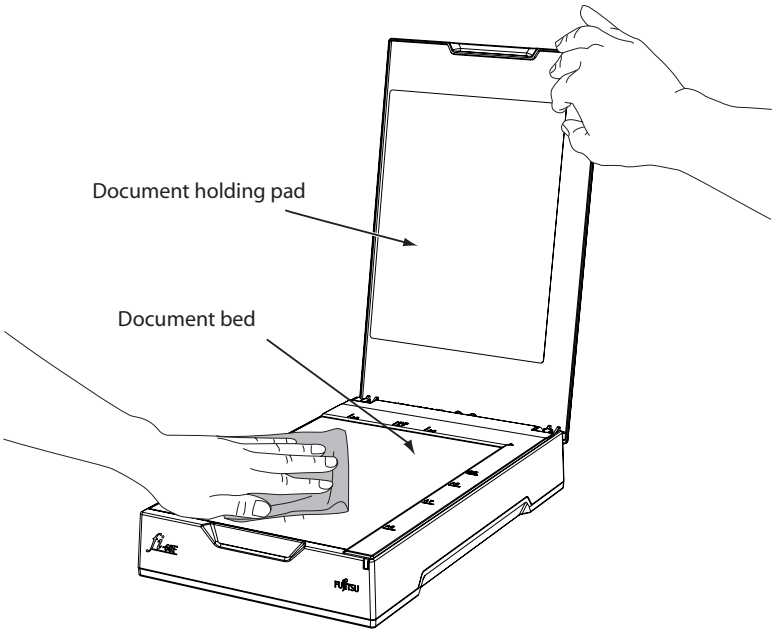
- Document holding pad
- Document bed



1. Open the document cover.



2. Clean the following locations using a soft, dry cloth moistened with cleaning fluid.



- Document holding pad
  Wipe gently.
- Document bed
  Wipe lightly.

ATTENTION

Do not allow moisture to get inside the device during cleaning.

3. Wait for cleaned parts to dry.

4. Gently close the document cover.

Chapter 3

TROUBLESHOOTING

This chapter describes how to remedy troubles, items to check and how to check device labels before contacting the agent where you bought the scanner.

About troubles that are not described here, and the details of the errors, refer to the FUJITSU TWAIN32 Scanner Driver Help.

3

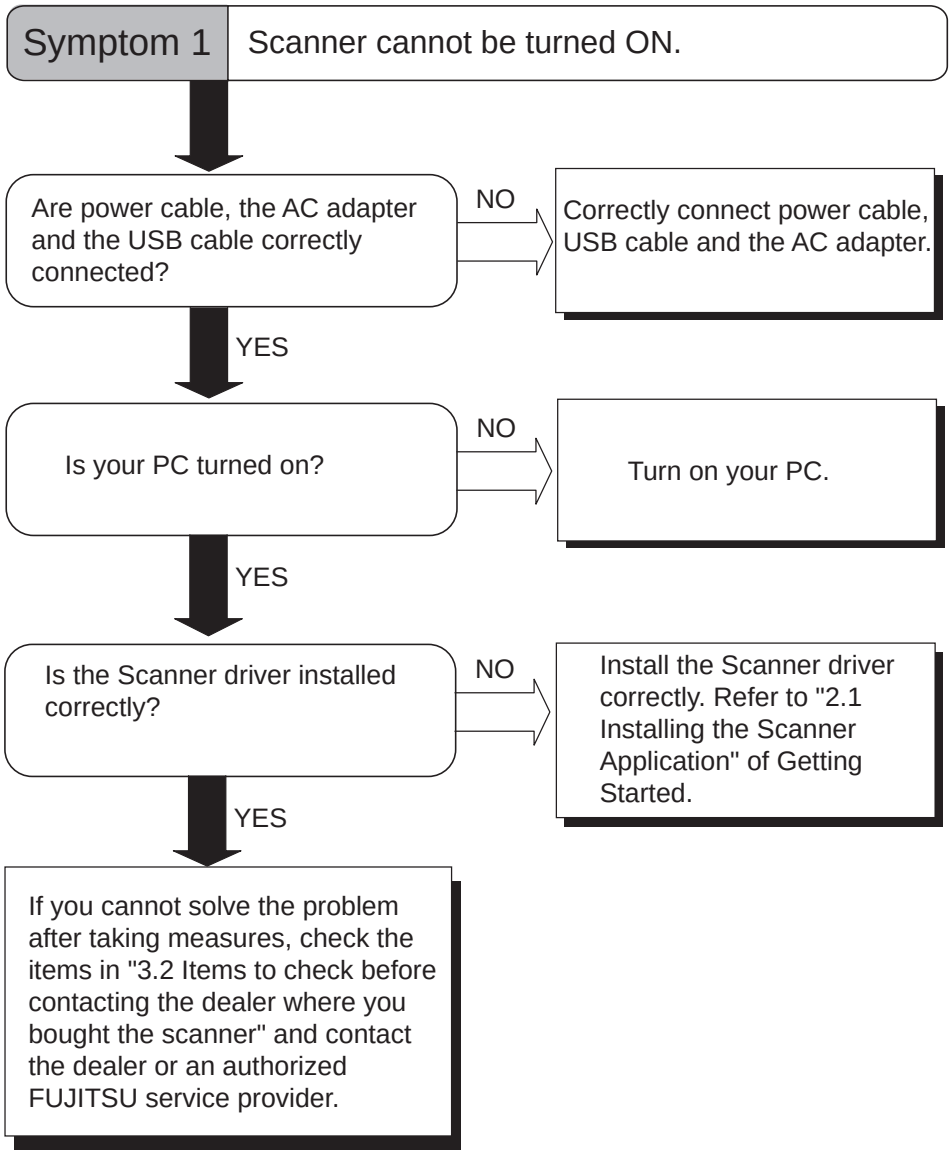
3.1 Remedying Typical Troubles 26

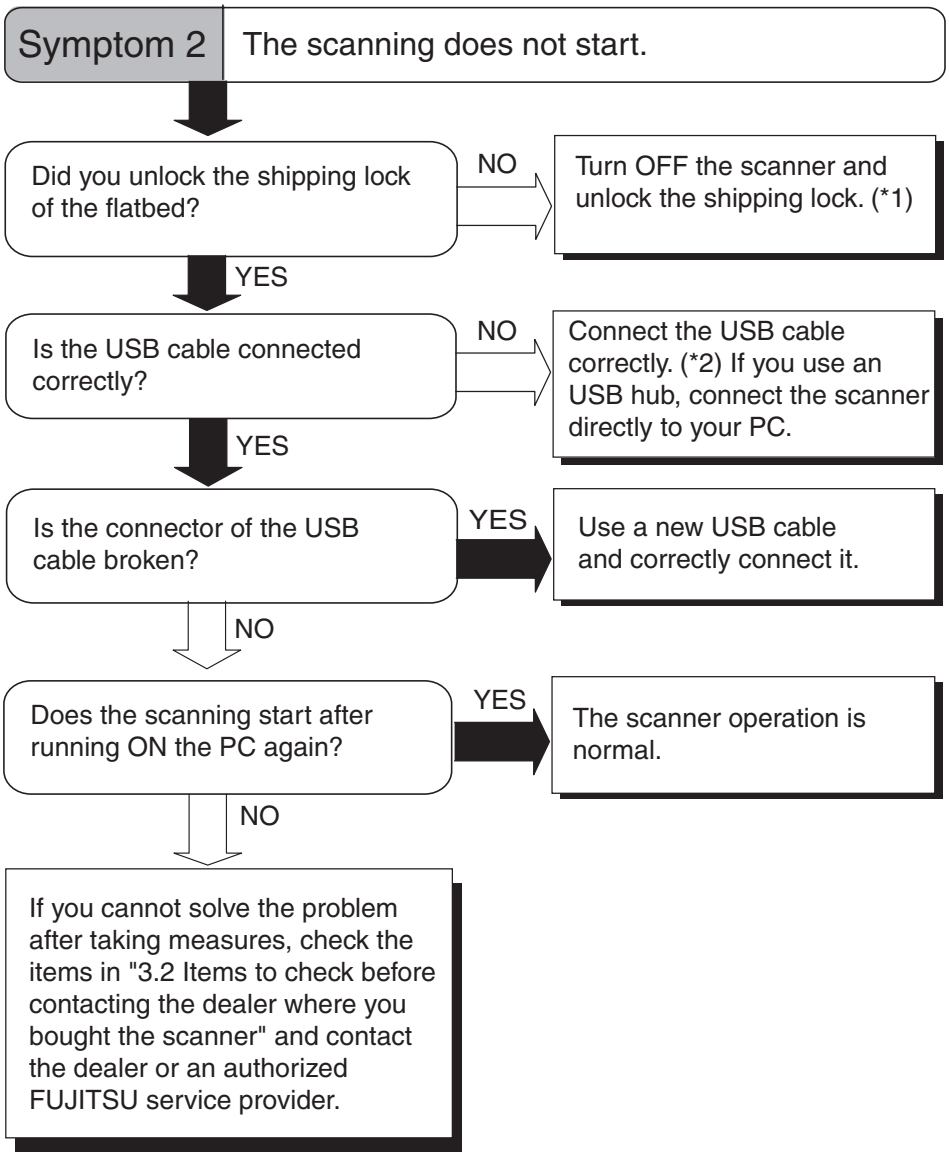
3.2 Items to Check Before Contacting the Agent Where You Bought the Scanner 32

3.3 Checking the Label on the Scanner 34

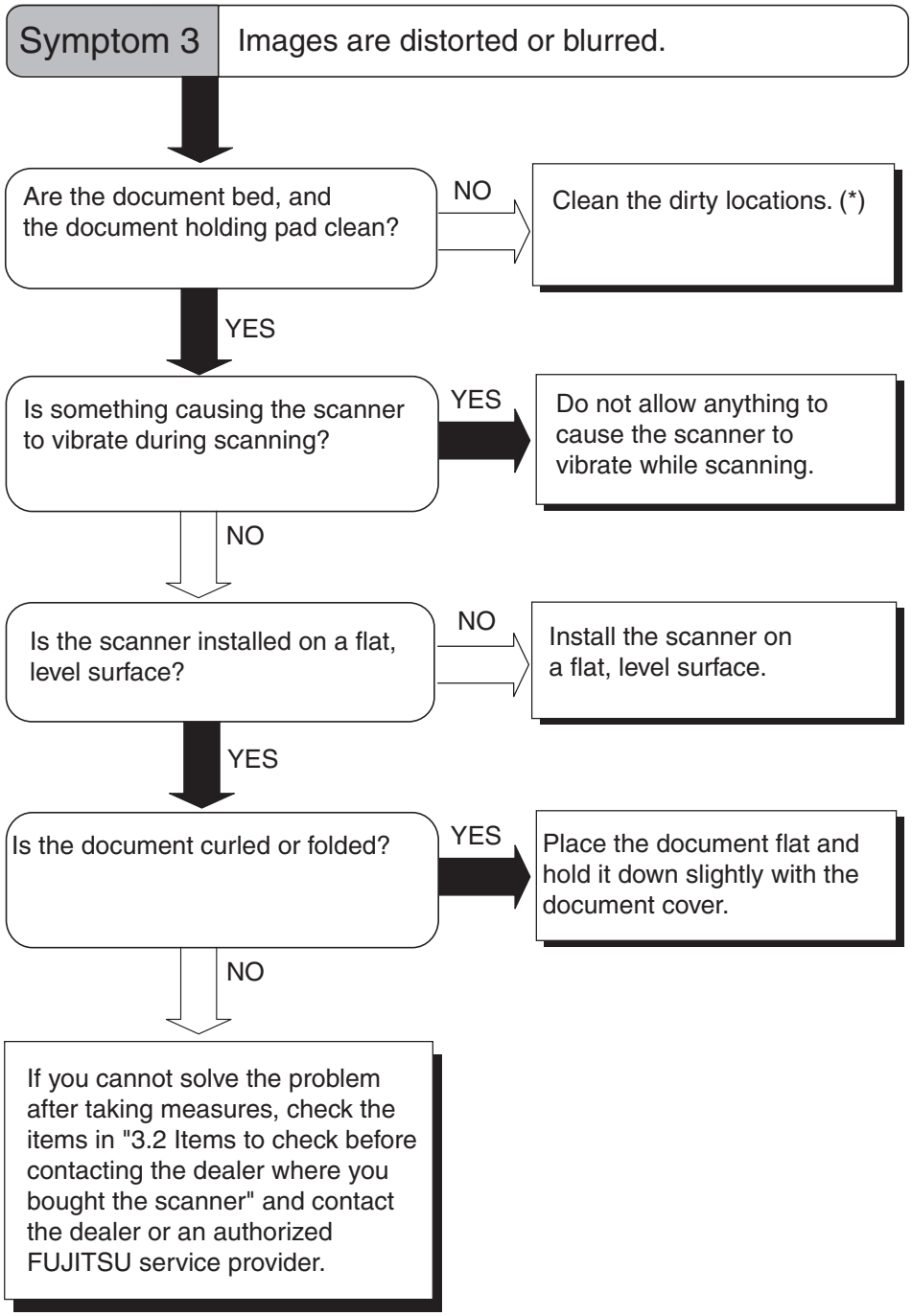
3.1 Remedying Typical Troubles

This section describes troubles that may occur during scanning and how to remedy that trouble. Before you ask for repair, check the following flowcharts.
If the remedies in these flowcharts do not solve the problem, check the items in "3.2 Items to Check Before Contacting the Agent Where You Bought the Scanner" (page 32) and then contact the agent where you bought the scanner.

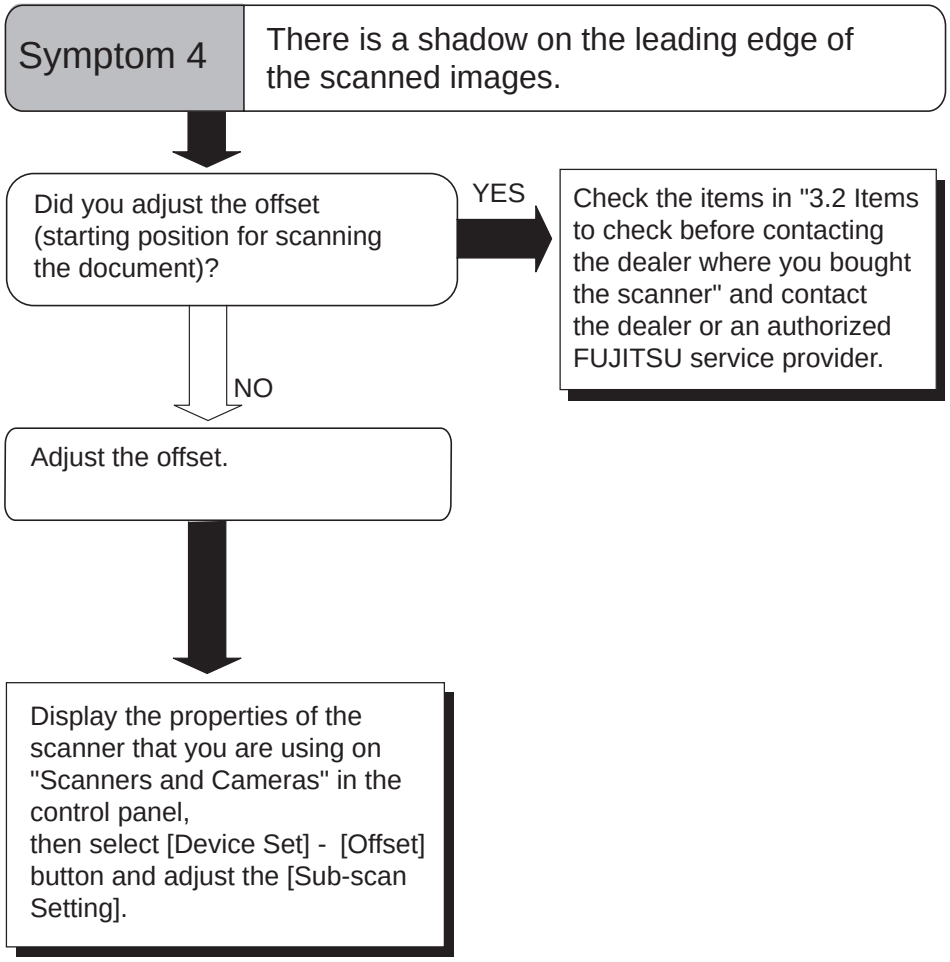


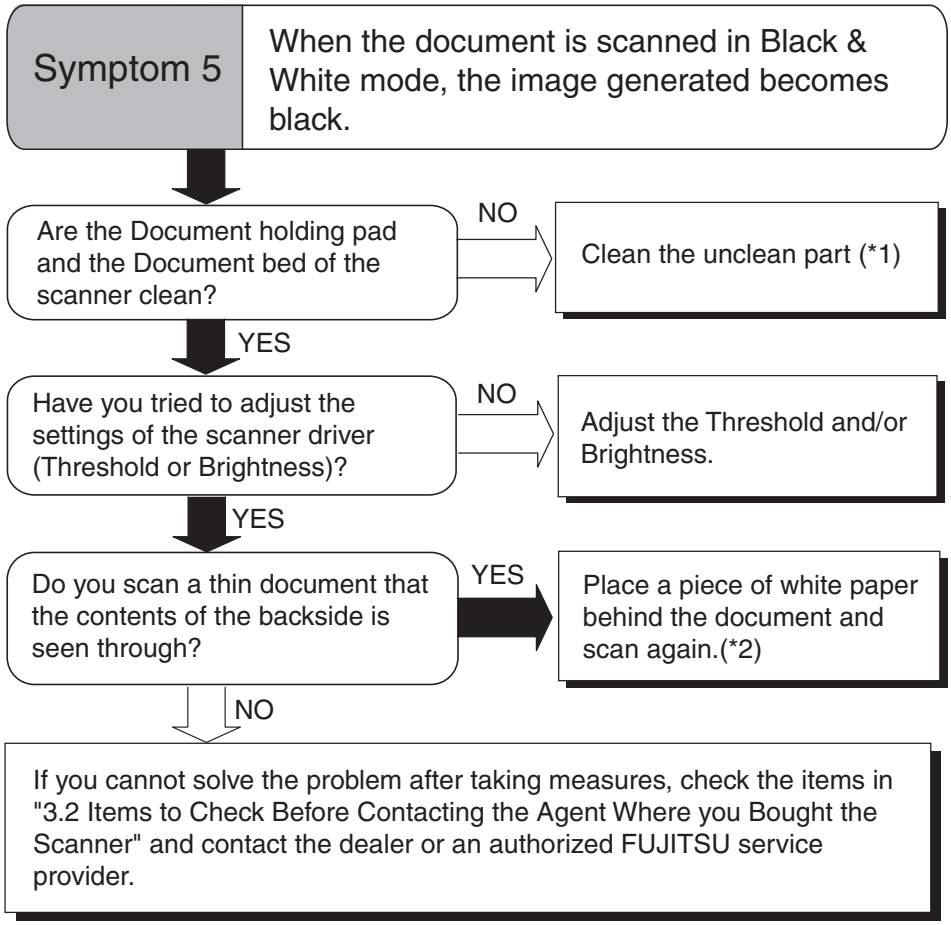


*1) For details, refer to "Getting Started" 2.2 Installing the Scanner.
*2) For details, refer to "Getting Started" 2.3 Connecting the scanner to your PC.



*) For details on how to clean dirty locations, see "Chapter 2 DAILY CARE" (page 21).

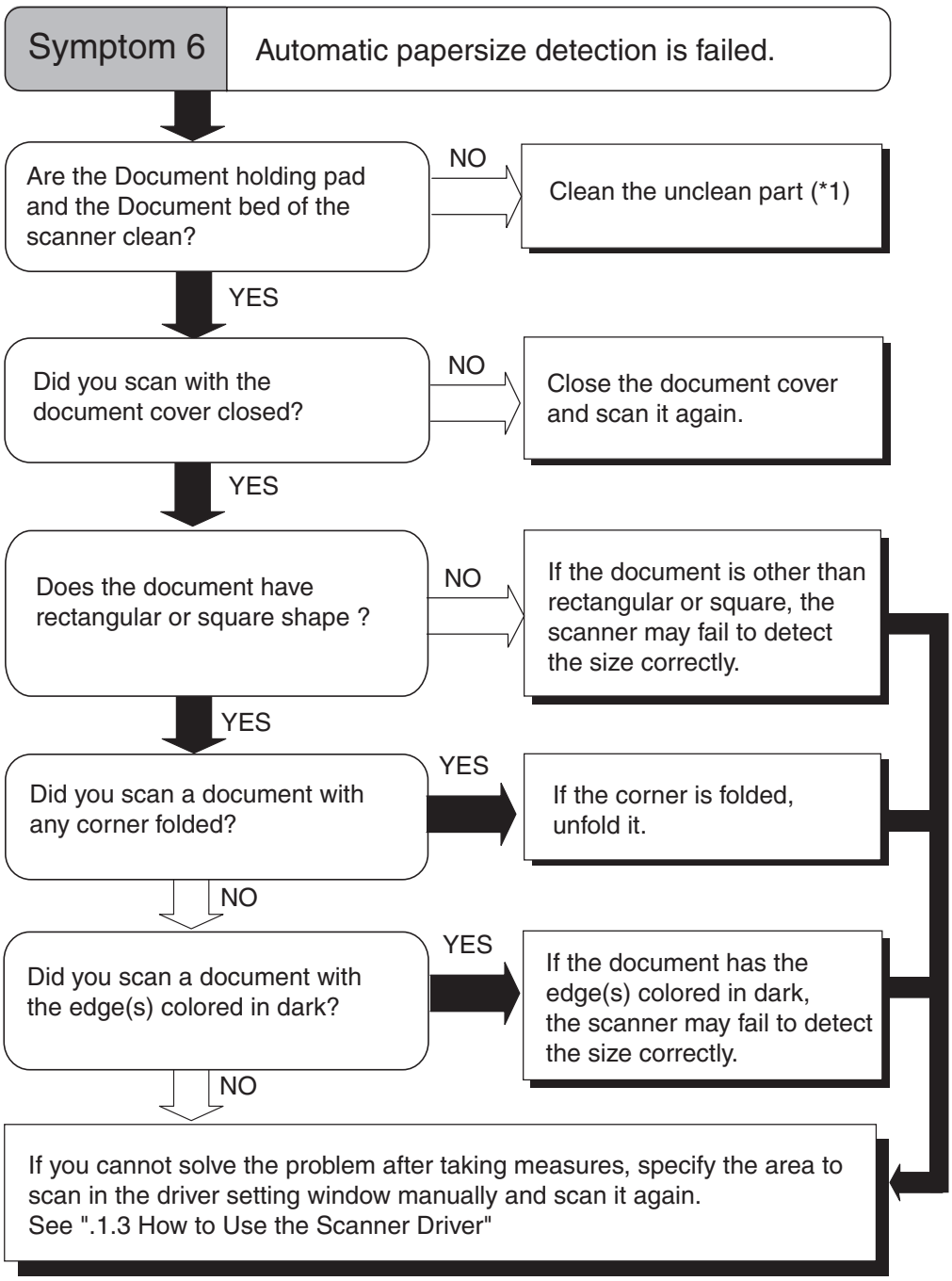

Symptom 4
There is a shadow on the leading edge of the scanned images.
Did you adjust the offset (starting position for scanning the document)?
YES
Check the items in "3.2 Items to check before contacting the dealer where you bought the scanner" and contact the dealer or an authorized FUJITSU service provider.
NO
Adjust the offset.
Display the properties of the scanner that you are using on "Scanners and Cameras" in the control panel, then select [Device Set] - [Offset] button and adjust the [Sub-scan Setting].



*1) For cleaning the unclean part, see Chapter 2 DAILY CARE.

*2) - When there is any contents such as characters on the backside of the document, it may be seen through and appeared in the scanned image.

- When using "Automatic Size and Skew detection", lap over the document with a white paper of the same size of the document.



*1) For cleaning the unclean part, see Chapter 2 DAILY CARE.

3.2 Items to Check Before Contacting the Agent Where You Bought the Scanner

Check the following items before you contact the agent where you bought the scanner.

■ General Details

Item	findings
Model	(Example) fi-60F For details on model, see "3.3 Checking the Label on the Scanner" (page 34).
Serial No.	(Example) 000001 For details on serial No., see "3.3 Checking the Label on the Scanner" (page 34).
Production date	(Example) 2004-9 (September, 2004) For details on production date, see "3.3 Checking the Label on the Scanner" (page 34).
Date of purchase	
Symptom	
Frequency of trouble	

■ Installation or PC connection issues

■ Problem at the time of personal computer connection

Item	findings
OS (Windows)	
Displayed error message	
Interface	USB 2.0
Interface controllers	(Example) Made by Intel, 82801EB

■ Imaging system trouble

Item	findings
Type and version of scanner driver	
Type of interface controller	(Example) Made by Intel, 82801EB
OS (Windows)	
Application software	(Example) ScandAll 21

■ Other

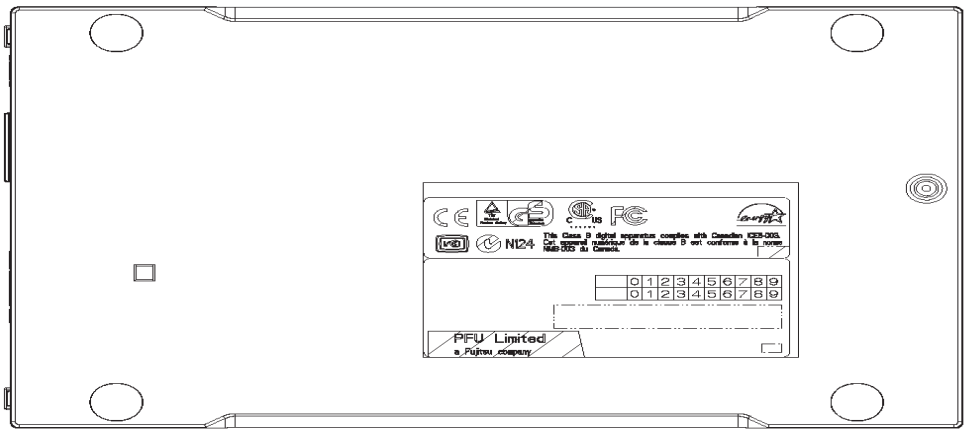
Item	findings
Can the scanner image and the document be sent by e-mail or Fax?	

3.3 Checking the Label on the Scanner

This section describes how to check the label on the scanner.

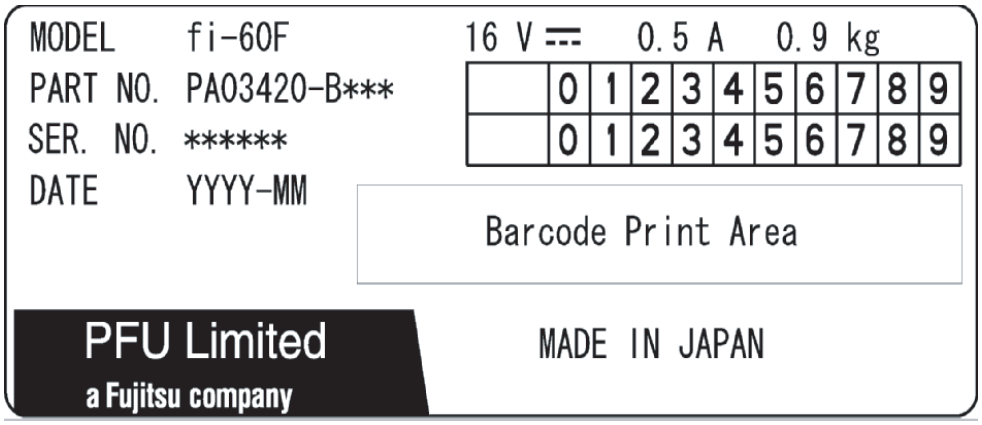
■ Position of the Labels on the Scanner (scanner bottom)

The following shows where the labels are located on the scanner.



Label A (example): Indicates various standards that the scanner conforms with.

Label B (example): Indicates scanner information.



Chapter 4

SCANNER SPECIFICATION

This chapter lists the scanner specifications.

4.1 Basic Specifications **36**

4.2 Installation Specifications **37**

4.3 External Dimensions **38**

4.1 Basic Specifications

1	Scanner Type		Flatbed	-
2	Image sensor		Color Contact Image Sensor (CMOS IC)	
3	Light source		Three LEDs (RGB)	
4	Scanning area	Maximum	148 x105mm 5.8 in X 4.13 in	A6
				-
5	Scanning Speed (Note (*1))	Binary (monochrome)	1.0 sec	200 dpi, max size USB 2.0
		Color	1.3 sec	150 dpi max size USB 2.0
6	Optical Resolution		600 dpi	-
7	Output resolution	Binary (monochrome)	50 - 600 dpi	Scalable in 1 dpi increments
		Grayscale	50 - 600 dpi	Scalable in 1 dpi increments
		Color	50 - 600 dpi	Scalable in 1 dpi increments
8	Grayscale level (internal)		8 bits per color	Internal 16 bits
9	Halftone Patterns		Dither / error diffusion	-
10	Interface (Note (*2))		USB 2.0 / 1.1	B type

*1) The scanning speed is the maximum speed of the scanner hardware. Software processing time such as data transfer time is added to the actual scanning time.

*2) If you connect the scanner with USB 2.0, it is required that the USB port and the Hub are compliant with USB 2.0. The scanning speed may slow down when you connect the scanner with USB 1.1. If your computer has the compatible USB 2.0 port, please use it.

4.2 Installation Specifications

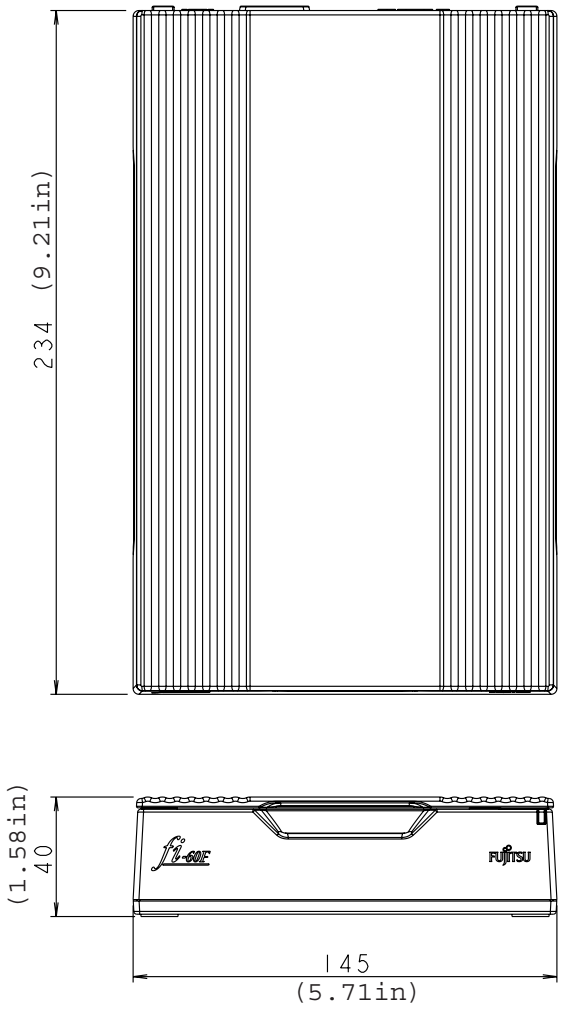
Item		Specification		
Dimensions (mm) (just the scanner, document cover closed)		Depth	Width	Height
		234 (9.21 in)	145 (5.71 in)	40 (1.58 in)
Installation Space (mm)		Depth	Width	Height
		281 (11.06 in)	145 (5.71 in)	257 (10.12 in)
Weight (kg)		0.9 (2 lbs)		
Input power	Voltage	100 to 120 VAC ±10% 220 to 240 VAC ±10%		
	Phases	Single-phase		
	Frequency	50 / 60 ± 3Hz		
Power consumption		Operating : 8W Stand by: 2W Low Power Mode: 1W		

Installation Space is the reference value of an installation space required for opening and closing the document cover.

Item		Specification	
Ambient condition	Device status	Operating	Not operating
	Temperature	5 to 35 °C (42 to 95°F)	-20 to 60 °C (-4 to 140°F)
	Humidity	20 to 80 % (no condensation)	8 to 95 %
Heat capacity		6.1 kcal/h	
Shipping Weight (kg)		2.0 (4.41 lbs)	

4.3 External Dimensions

The following shows the external dimensions of the fi-60F:



(Unit : mm)

INDEX

A

Ambient condition 37

C

Checking Labels on the Scanner 34
Cleaning Materials 22
  Cleaner F1 22
Cleaning the Flat bed 22
Configuration Window of FUJITSU ISIS Scanner Driver 14

E

Excluding a Color in the Image (dropout color) 20
External Dimensions 37, 38

F

FUJITSU ISIS Scanner Driver 11
FUJITSU TWAIN32 Scanner Driver 5

G

Grayscale level 36

H

Halftone Patterns 36
Heat capacity 37
How to use the Scanner Driver 5

I

Image sensor 36
Input power 37
Installation Space 37
Interface 36

L

Light source 36
Loading Documents on the Flatbed for Scanning 3

O

Optical Resolution 36
Output resolution 36

P

Power consumption 37
Power save mode 2

R

Remedying Typical Troubles 26

S

Scanner specifications 35
  Ambient condition 37
  Dimensions 37
  Grayscale level 36
  Halftone patterns 36
  Heat capacity 37
  Image sensor 36
  Input power 37
  Installation Space 37
  Interface 36

Light source 36
Optional resolution 36
Output resolution 36
Power consumption 37
Scanner Type 36
Scanning area 36
Scanning Speed 36
Shipping Weight 37
Weight 37
Scanner Type 36
Scanning area 36
Scanning Speed 36
Setting Window for FUJITSU TWAIN32
Scanner Driver 8
Shipping Weight 37

T

TROUBLESHOOTING 25
Turning the Scanner ON 2

W

Weight 37

fi-60F Image Scanner Operator's Guide

P3PC-1112-02EN

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